

# AYŞENUR PAMUKÇU

## Education



### Contact

**Address:**  
Izmir Katip Celebi University,  
Central Research Laboratories,  
Cigli, Izmir.

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### Languages

**Turkish** – Native  
**English** – C2  
**Spanish** – A2

### Computer Skills

**Microsoft Office** – Advanced  
**R** – Intermediate  
**Matlab** – Elementary

### Awards and Honors

Top Student of the  
Bioengineering Department in  
2018, 3.68.

**2018-Ongoing, MSc in Biomedical Technologies**  
Izmir Katip Celebi University, Izmir, Turkey.

**2014–2018, BSc in Bioengineering**  
Manisa Celal Bayar University, Manisa, Turkey.

**2013-2014**  
The School of Foreign Languages, Manisa Celal Bayar University,  
Turkey.

### Experiences

**09/2018 – Ongoing, MSc Student**  
Nanomedicine and Biomaterials Laboratory, Izmir Katip Celebi  
University, Izmir, Turkey.

**04/2017 – 06/2018, Undergraduate Student**  
Vaccine and Drug Development Research Laboratory, Manisa Celal  
Bayar University, Manisa, Turkey.

**15/08/2016 – 09/09/2016, Summer Intern**  
Microbiology Research and Genetics Laboratory, Ege University,  
Izmir, Turkey.

**11/07/2016 – 05/08/2016, Summer Intern**  
Genmar Diagnostic Products-R&D Company, Izmir, Turkey.

### Research Interests

**Nanomedicine** – Development of nanoparticles for use in medical  
applications.

**Tissue Engineering** – Fabrication of scaffolds and functionalization via  
nanoparticles.

**Drug/Gene Delivery** – Nanoparticle-mediated drug/gene delivery  
systems.

**Microfluidics** – Drug and single cell screening via microfluidic  
platforms.

**Biopharmaceuticals** – Design and production of biological drugs.

### Skills

Solid state peptide synthesis  
Sol-gel nanoparticle synthesis, functionalization and characterization  
Electrospinning  
Cell culture  
SDS-PAGE Electrophoresis  
Western Blot

## Projects

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1. 2019-Ongoing, Researcher, IKCU-BAP, "Preparation of Novel Scaffold Systems Reinforced with Mesoporous Silica Nanoparticles for BMP-2 Delivery and *in vitro* Investigations".
2. 2018-Ongoing, Scholarship holder, IKCU-BAP, "Design of MSN-guided 3D Bioactive Scaffolds for Tissue Engineering".
3. 2017-2018, Scholarship holder, Tübitak 3001, "siRNA Transfection and GFP Silencing using pHEMA-Chitosan Composite Nanospheres".
4. 2017-2018, Undergraduate student, MCBU-BAP, "Development of Efficient Drug Delivery Vehicles Against Prostate Cancer Cells by Using pHEMA-Chitosan Composite Nanospheres".
5. 2017-2018, Undergraduate student, MCBU-BAP, "Development of Home Made Polysulfone Membranes to Use in Immunoblot Technique".

## Publications

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1. **Pamukcu, A.**, Kaba, F., Sen Karaman, D. Tuning the Tensile Strength of Electrospun Fibers by Mesoporous Silica Nanoparticle Integration for Tissue Engineering Applications. 2019, IEEE Xplore, in press.
2. **Pamukcu, A.**, Portakal, H.S., Eroglu, E. New Generation Biomaterials Used in Delivery of Therapeutic Molecules. 2018, Erzincan University Journal of Science and Technology, 11(3), 524-542.

## Proceedings

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1. **Pamukcu, A.**, Kaba, F., Sen Karaman, D. Tuning the Tensile Strength of Electrospun Fibers by Mesoporous Silica Nanoparticle Integration for Tissue Engineering Applications. TIPTEKNO'19 Medical Technologies Congress, Izmir, October 2019.
2. Durna, G., Celebi, K., Bakay, E., **Pamukcu, A.**, Topaloglu Avsar, N., Sen Karaman, D. "Combinatory Antimicrobial Photodynamic Therapy with Silica Nanoparticles", 4th GTU Photodynamic Day, Gebze, Kocaeli, April 2019.
3. Eroglu, E., **Pamukcu, A.**, Portakal, H.S. "Terapötik Molekül Aktarımında Nano-Taşıyıcılar: Resveratrol Yüklü pHEMA-Chitosan Nanoparçacıklarının Sentezi, Karakterizasyonu ve *in vitro* Antikanser Aktivitesi." 13. Ulusal Kimya Mühendisliği Kongresi, Van, 2018.
4. Portakal, H.S., **Pamukcu, A.**, Eroglu, E. "A Novel Approach to Gene Therapy: Synthesis and Characterization of pHEMA-Chitosan Nanospheres Loaded with siRNA." 14th Nanoscience and Nanotechnology Conference, Izmir, 2018
5. **Pamukcu, A.**, Portakal, H.S., Eroglu, E. "Synthesis and Characterization of pHEMA Chitosan Nanospheres Encapsulated with an Anticancer Agent, Resveratrol." I. International University Industry Cooperation, R&D and Innovation Congress, Manisa, 2017.